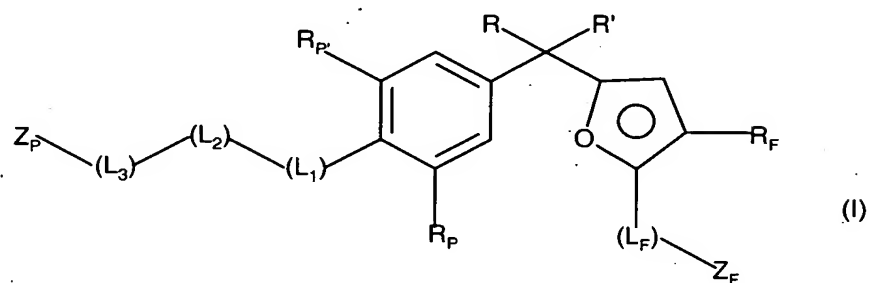


Amendments to the Claims

1. (Currently Amended) A compound represented by formula I or a pharmaceutically acceptable salt derivative thereof:



wherein;

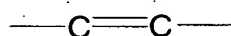
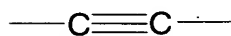
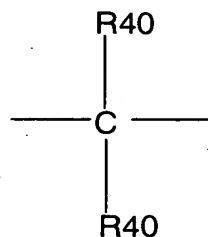
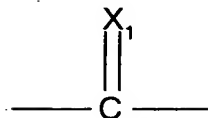
R and R' are independently C₁-C₄ alkyl, C₁-C₄ fluoroalkyl, or together R and R' form a substituted or unsubstituted, saturated or unsaturated carbocyclic ring having from 3 to 8 carbon atoms;

R_P, R_{P'}, and R_F are independently selected from the group consisting of hydrogen, halo, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ fluoroalkyl, -O-C₁-C₄ alkyl, -S-C₁-C₄ alkyl, -O-C₁-C₄ fluoroalkyl, -CN, -NO₂, acetyl, -S-C₁-C₄ fluoroalkyl, C₂-C₄ alkenyl, C₃-C₄ cycloalkyl, and C₃-C₄ cycloalkenyl;

(L₁), (L₂), (L₃), and (L_F) are divalent linking groups independently selected from the group consisting of

a bond,

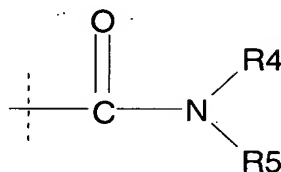
oxygen



where each R₄₀ is independently hydrogen, C₁-C₅ alkyl or C₁-C₅ fluoroalkyl;

where X₁ is O, CH₂ or [H, OH];

Z_F is



where R₄ and R₅ are ~~independently~~ independent hydrogen, C₁-C₄ alkyl, -O-C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ haloalkyl, -NH(C₁-C₄ alkyl), or cyclopropyl, with the proviso that only one of R₄ or R₅ may be hydrogen;

Z_P is

methyl,
ethyl,
n-propyl,
1-methylethyl,
1-methylpropyl,
2-methylpropyl,
1,1-dimethylethyl,

1,1-dimethylpropyl,
1,2-dimethylpropyl,
2,2-dimethylpropyl,
1-hydroxy-2,2-dimethylpropyl,
1-hydroxy-1,2,2-trimethylpropyl,
2-hydroxy-2-methylbutoxy
2-hydroxy-2-ethylbutoxy
2-hydroxy-2-ethyl-3-methylbutoxy
2-hydroxy-2-methyl-3-methylbutoxy
2-hydroxy-1,3,3-trimethylbutoxy
2-hydroxy-1-ethyl-3,3-dimethylbutoxy
2-hydroxy-1,2-diethylbutoxy
2-hydroxy-2-ethyl-1-methylbutoxy
3-methyl-3-hydroxypentyl,
3-methyl-3-hydroxypentenyl,
3-methyl-3-hydroxypentynyl,
3-ethyl-3-hydroxypentyl,
3-ethyl-3-hydroxypentenyl,
3-ethyl-3-hydroxypentynyl,
3-ethyl-3-hydroxy-4-methylpentyl,
3-ethyl-3-hydroxy-4-methylpentenyl,
3-ethyl-3-hydroxy-4-methylpentynyl,
3-propyl-3-hydroxypentyl,
3-propyl-3-hydroxypentenyl,
3-propyl-3-hydroxypentynyl,
1-hydroxy-2-methyl-1-(methylethyl)propyl
1-hydroxycyclopentenyl,
1-hydroxycyclohexenyl,
1-hydroxycycloheptenyl,
1-hydroxycyclooctenyl,
1-hydroxycyclopropyl,
1-hydroxycyclobutyl,
1-hydroxycyclopentyl,
1-hydroxycyclohexyl,

1-hydroxycycloheptyl, or
1-hydroxycyclooctyl.

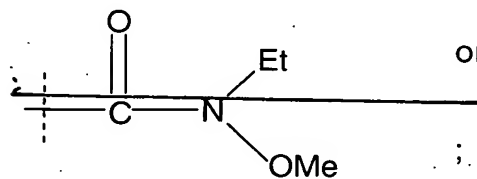
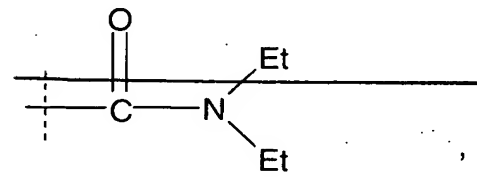
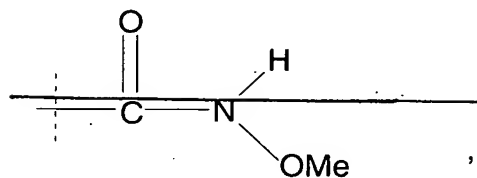
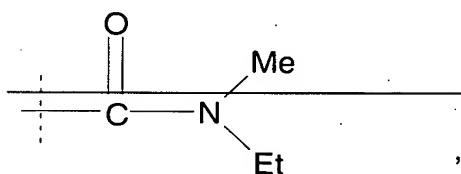
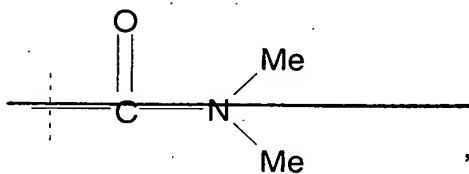
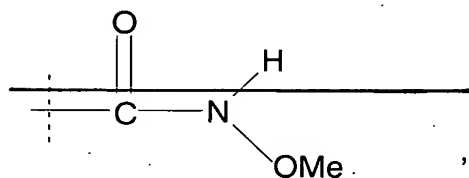
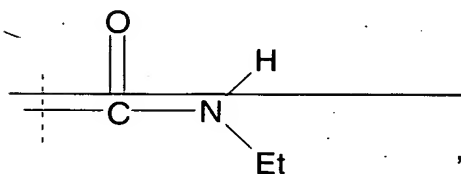
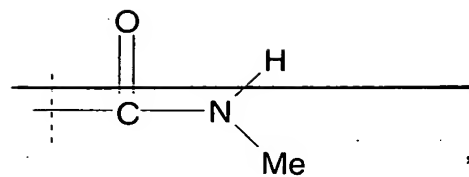
2..(Currently Amended) The compound of claim 1 wherein

Z_P is 1,1-dimethylethyl, 1,2-dimethylpropyl, 2,2-dimethylpropyl, 1-hydroxy-2,2-dimethylpropyl, or 1-hydroxy-1,2,2-trimethylpropyl, provided that (L₁), (L₂), (L₃) are all bonds;

Z_F is selected from:

-C(O)NHMe,
-C(O)NHEt,
-C(O)NHOMe,
-C(O)NHOEt,
-C(O)NH(iPr),
-C(O)NH(tBu),
-C(O)NH(CF₃),
-C(O)N(Me)₂,
-C(O)NMeEt,
-C(O)NMe(iPr),
-C(O)NMe(tBu),
-C(O)NMe(CF₃),
-C(O)N(Me)F,
-C(O)N(Et)F
-C(O)N(iPr)F,
-C(O)N(tBu)F,
-C(O)N(Et)₂, or
-C(O)NEt(iPr); and

Z_F is



or

or a pharmaceutically acceptable salt or prodrug thereof.

BEST AVAILABLE COPY

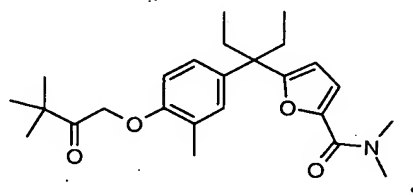
3. (Original) The compound of claim 2 wherein Z_F is selected from:

-C(O)NHMe,
-C(O)NHEt,
-C(O)NH(iPr),
-C(O)NH(tBu),
-C(O)N(Me)₂,
-C(O)NMeEt,
-C(O)NMe(iPr),
-C(O)NMe(tBu),
-C(O)N(Et)₂, or
-C(O)NEt(iPr);

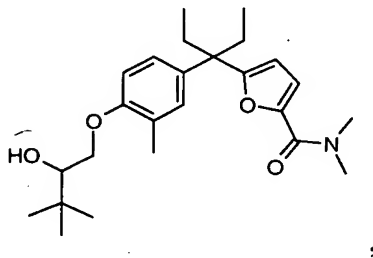
or a pharmaceutically acceptable salt or prodrug thereof.

4. (Original) A compound or a pharmaceutically acceptable salt or ester prodrug derivative thereof represented by formulae A to J as follows:

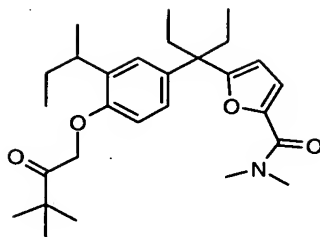
A)



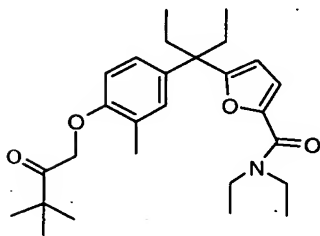
B)



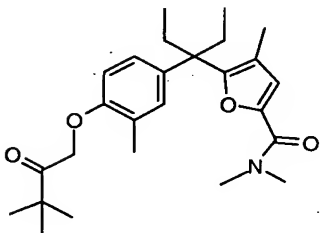
C)



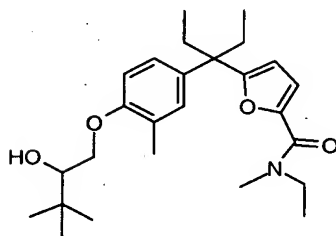
E)



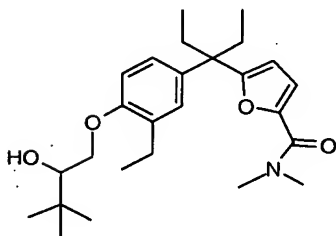
F)



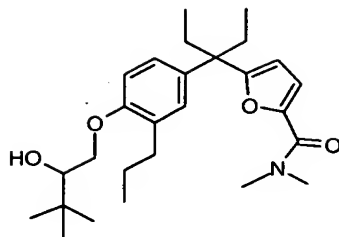
G)



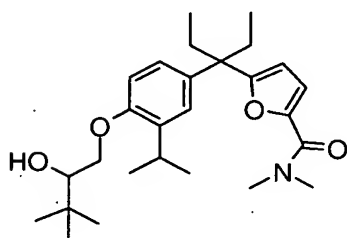
H)



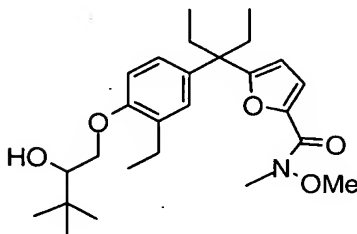
I)



J)



K)



5. (Currently Amended) The salt derivative of the compound according to ~~any~~ ~~of claims 1 to 4~~ claim 1 wherein the salt is sodium or potassium.

6. (Currently Amended) A pharmaceutical formulation comprising the compound of ~~any one of claims 1 to 4~~ claim 1 together with a pharmaceutically acceptable carrier or diluent.

7. (Currently Amended) A formulation for treating osteoporosis comprising:

Ingredient (A1): a vitamin D receptor modulator of claim ~~1 to 4~~;

Ingredient (B1):

one or more co-agents selected from the group consisting of:

- a. estrogens,
- b. androgens,
- c. calcium supplements,
- d. vitamin D metabolites,

- e. thiazide diuretics,
- f. calcitonin,
- g. bisphosphonates,
- h. SERMS, and
- i. fluorides; and

Ingredient (C1): optionally, a carrier or diluent.

8. (Original) The formulation of claim 7 wherein the weight ratio of (A1) to (B1) is from 10:1 to 1:1000.

9. (Currently Amended) A formulation for treating psoriasis comprising:

Ingredient (A2): a vitamin D receptor modulator according to claim 1
~~any one of claims 1 to 4;~~

Ingredient (B2):

one or more co-agents that are conventional for treatment psoriasis
selected from the group consisting of:

- a. topical glucocorticoids ,
- b. salicylic acid,
- c. crude coal tar; and

Ingredient (C2): optionally, a carrier or diluent.

10. (Original) The formulation of claim 9 wherein the weight ratio of (A2) to (B2) is from 1:10 to 1:100000.

11. (Currently Amended) A method of treating a mammal to prevent or alleviate the pathological effects of Acne, Actinic keratosis, Alopecia , Alzheimer's disease, Bone maintenance in zero gravity, Bone fracture healing, Breast cancer, Chemoprevention of Cancer, Crohn's disease, Colon cancer, Type I diabetes, Host-graft rejection, Hypercalcemia , Type II diabetes, Leukemia, Multiple sclerosis, Myelodysplastic syndrome, Insufficient sebum secretion, Osteomalacia, Osteoporosis, Insufficient dermal firmness, Insufficient dermal hydration, Psoriatic arthritis, Prostate cancer, Psoriasis, Renal osteodystrophy, Rheumatoid arthritis, Scleroderma, Skin cancer, Systemic lupus erythematosus, Skin cell ~~protection~~ damage from Mustard vesicants, Ulcerative colitis, Vitiligo, or Wrinkles; wherein

the method comprises administering a pharmaceutically effective amount of at least one compound of claim 1 ~~or 2 or 3~~.

12. (Original) The method of claim 11 for the treatment of psoriasis.

13. (Original) The method of claim 11 for the treatment of osteoporosis.

14. (Currently Amended) ~~A~~ The method of claim 11 for treating a mammal to prevent or alleviate skin cell damage from Mustard vesicants.

15. (Currently Amended) ~~A~~ The method of treating a mammal to prevent or alleviate the pathological effects of Benign prostatic hyperplasia or bladder cancer wherein the method comprises administering a pharmaceutically effective amount of at least one compound according to ~~any one of claims 1 to 4~~ claim 1.

16. (Currently Amended) ~~A~~ The method of treating or preventing disease states mediated by the Vitamin D receptor, wherein a mammal in need thereof is administered a pharmaceutically effective amount of a compound of Claim 1 ~~to 4~~.

17-22. (Canceled)